Spring-Loaded Tube Squeezing Device

Abstract:

A device for squeezing various household collapsible tubes comprises two lever handles, two pintles, two torsional springs, a primary roller, and a secondary roller. The lever handles are held together by and are free to rotate about the two pintles, forming a double non-crossing class 1 lever arrangement. The rollers, held in gudgeons by snap fit, are also free to rotate. The primary roller is distinguished from the secondary roller by having a crank at one end. The torsional springs, anchored by the pintles, provide a torque which causes the two rollers to clamp together. Operation of the tube squeezing device proceeds by inserting the crimped end of a collapsible tube between the rollers and turning the crank, thereby turning the rollers so as to squeeze the tube flat and to push its contents toward the nozzle end. Insertion and extraction of the tube is effected most readily by applying a compressive force to the two lever handles, creating a gap between the rollers for the tube to easily pass through.